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DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND RADM WILLIAM A. MOFFETT BUILDING 47123 BUSE ROAD, BLDG 2272 PATUXENT RIVER, MARYLAND 20670-1547

IN REPLY REFER TO

NAVAIRINST 3750.5B AIR 5.0F 24 Jun 99

NAVAIR INSTRUCTION 3750.5B

From: Commander, Naval Air Systems Command

Subj: AVIATION SAFETY PROGRAM

Ref: (a) OPNAVINST 5100.8G

(b) OPNAVINST 5450.180C

(c) OPNAVINST 3750.6Q

(d) OPNAVINST 5442.2G

(e) Integrated Program Team Manual Update Of Dec 96

(f) OPNAVINST 3120.32C

(g) NAVAIRINST 4130.1C

(h) NAVAIRINST 5215.12A

(i) OPNAVINST 3710.7R

(i) OPNAVINST 4790.2G

(k) NAVAIRINST 3710.1C

(I) OPNAVINST 5442.4M

(m) NAVSAFECENINST 3750.P1

(n) NAVAIRINST 3710.6E

(o) NAVAIRINST 3710.8B

(p) OPNAVINST 5102.1C

Encl: (1) Aviation Safety Office Monthly Survey Report Format

- (2) Test Wing/Air Station/NAVAVNDEPOT/Squadron Aviation Safety Council Guidelines
- (3) Safety Committee Guidelines
- (4) Annual Aviation Safety Award
- (5) Recommended Aircraft Mishap Board Training Outline
- (6) Sample NATOPS Jacket Checklist
- 1. <u>Purpose</u>. To issue policies and provisions of the Naval Air Systems Command (NAVAIR) Aviation Safety Program.
- 2. <u>Cancellation</u>. This instruction supersedes NAVAIRINST 3750.5A of 10 March 1994. Since this is a major revision, changes have not been indicated.
- 3. <u>Scope</u>. The following policy shall apply to all military and civil service personnel directly involved with, or in support of, NAVAIR aviation activities or operations.

S/N: 0808-LD-027-5080

- 4. <u>Background</u>. In 1970, the United States Navy (USN) incurred 439 major aircraft mishaps during approximately 3.2 million flight hours for a mishap rate of 13.7 mishaps per 100,000 flight hours. In Fiscal Year 1998, USN/United States Marine Corps (USMC) units flew 1.507 million flight hours and incurred 36 Class A Flight Mishaps for a rate of 2.39 mishaps per 100,000 flight hours. That is a dramatic improvement, and is the direct result of professionalism and attention to priorities, coupled with our continuing effort of improving aircraft reliability and the human/machine interface. Further reductions will require our dedicated use of operational risk management in all phases of our flight operations, and increased identification and analysis of the incidents that are indicators of weaknesses in our Aviation Safety Program.
- 5. <u>Discussion</u>. NAVAIR's dual mission encompasses responsibility for the development, production, and technical support of aircraft and airborne weapon systems for the Navy and Marine Corps, and Type Commander (TYCOM) responsibility for NAVAIR aircraft. In that regard, one goal of the NAVAIR Aviation Safety Program is to increase readiness throughout the Navy by reducing aircraft systems damage and personnel injuries caused by product deficiencies. The other goal is to ensure the safe operation of NAVAIR aircraft, and protect the safety of NAVAIR aviation personnel through proactive safety awareness and operational risk management.
- a. <u>Professionalism</u>. Although most NAVAIR activities have neither the organization nor the function of fleet squadrons, Commanders/Commanding Officers are encouraged to develop a ready room atmosphere to foster safety awareness and professional development. The workload of aircrew and support personnel, to include project engineer(s), shall be monitored to ensure personnel enter the flight brief with complete attention directed to the preparation and execution of a safe flight. Commanders/Commanding Officers shall ensure procedures are incorporated to evaluate and minimize the risk of complacency or overestimation of the individual pilot or copilot's abilities.
- b. Operational Necessity. Given NAVAIR's unique mission, there is no flight conducted by NAVAIR which meets the definition of "operational necessity" per reference (i).
- c. Privileged Information. Naval aircraft Mishap Safety Investigation Reports (MSIR) are privileged, limited use, limited distribution safety documents. Reference (c) clearly defines the circumstances under which mishap reports may be released. Unauthorized disclosure is a criminal offense punishable under Article 92 of the Uniform Code of Military Justice (UCMJ). This system has been upheld in the U.S. Supreme Court, 9 to 0, U.S. vs. Weber, 1984. Results of naval aircraft mishap investigations conducted following reference (a) are not releasable outside of the naval aviation safety community. Government workers needing access to Mishap Reports to perform their duties are authorized access to those reports. Contractors needing access to mishap reports to properly support their Navy contracts are authorized access, but access is limited to the information required for their duties. Knowledge gained from those reports shall not be passed to their headquarters or used for any other purpose than naval aviation safety. All contractors with access to MSIRs shall be formally briefed on privileged information protection procedures.

- 6. Aviation Safety Organization. The Deputy Chief of Naval Operations for Resources, Warfare Requirements and Assessment, Air Warfare Division (N-88) is responsible for naval aviation safety per reference (a). The Commander, Naval Safety Center has been designated to assist the Chief of Naval Operations (CNO) in the prevention of mishaps, and in promoting and monitoring safety per reference (b). Commander, Naval Air System Command (COMNAVAIRSYSCOM) exercises administrative control of the aircraft assigned to NAVAIR, and accomplishes the mission of aircraft material support. NAVAIR is a "controlling custodian" as defined in reference (c) for purposes of aircraft mishap prevention, investigation, reporting, and endorsement. NAVAIR provides aviation safety support to all NAVAIR aviation activities, the naval aviation Program Executive Officers (PEOs) and their assigned programs in the execution of their acquisition responsibilities. NAVAIR also administers the safety program for naval aircraft contracts under administrative control of the Defense Logistics Agency (DLA) per the Tri-Service Agreement, all aircraft assigned to NAVAIR "reporting custodians" per reference (d), and for those aircraft assigned to the Department of Defense (DoD) components for which NAVAIR is the Procuring Contracting Officer (PCO). The following subparagraphs further define the NAVAIR aviation safety organization:
- a. <u>COMNAVAIRSYSCOM</u>. Director, Aviation Safety Programs (AIR-5.0F) functions as a special assistant, reporting directly to both the Vice Commander (AIR-09) per reference (e) and the Assistant Commander for Test and Evaluation (AIR-5.0), and manages the Aviation Safety Program throughout NAVAIR. In addition to the safety duties contained in references (c), (e), and (f), the following specific duties apply:
- (1) manage within NAVAIR the aviation safety program normally associated with an aircraft controlling custodian, i.e., policy, objectives, goals, advisories, status, etc., for staff and shore activities;
- (2) manage a program for identification of material hazards that cause aviation mishaps and personnel injury throughout the Navy;
- (3) provide advisories/statistics on material hazards causing mishaps to the naval maintenance and design engineering organizations;
- (4) manage a program which ensures NAVAIR and PEO response to controlling custodian mishap report recommendations required in reference (c);
- (5) coordinate, prepare, and staff all reference (c) MSIR endorsements for COMNAVAIRSYSCOM and the PEOs;
- (6) serve as liaison between CNO, the Commandant of the Marine Corps (CMC), the PEOs, and COMNAVAIRSYSCOM in regard to the coordination of flight restrictive technical directives (aircraft groundings), and provide CNO/CMC/PEO concurrence when safety of flight/grounding actions are involved per reference (h);

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- (7) coordinate assignment of the Aviation Safety Inspector for the Naval Inspector General Team during scheduled inspections of NAVAIR activities;
- (8) serve as the Advisory Board Member and Coordinator for the Naval Air Training and Operating Procedures Standardization (NATOPS) program per reference (i);
- (9) provide safety support to all program managers in the Naval Aviation Systems Team (TEAM);
- (10) manage within NAVAIR the safety program for all aircraft in the custody of contractors for which NAVAIR is PCO. References (j) and (k) provide a partial listing of monitoring duties;
 - (11) manage an annual NAVAIR Aviation Safety Award Program;
- (12) coordinate mishap investigations for NAVAIR activities, including DLA activities operating naval aircraft; and
- (13) manage a program for validation of the "safety category" technical directive designation as amplified in reference (g).

b. Commander, Naval Test Wings (COMNAVTESTWINGs)

- (1) COMNAVTESTWINGs shall appoint a trained Aviation Safety Officer (ASO) to his staff to administer test wing and squadron aviation safety programs. The position of Test Wing ASO shall be a primary duty billet (with minimal collateral duties assigned) and separate and distinct from subordinate command safety billets. All NAVAIR ASOs shall be trained by the Naval Postgraduate School.
- (2) The Test Wing ASO shall encourage maximum participation possible in the local Air Station Safety Council, to include all wing and tenant activities, whether they belong to NAVAIR or not. It is important that all activities flying off the same airfield work together to standardize procedures and solve mutual concerns.

c. Reporting Custodians

- (1) Each activity with assigned aircraft for purposes of flight, repair/rework, or storage is designated a "reporting custodian" and is totally responsible for the safety of its assigned aircraft, equipment, and personnel. The reporting custodian shall establish an aviation safety program that includes a prevention program, a pre-mishap plan, and standard operating procedures per references (c), (f), (j), and (k). NAVAIR reporting custodians shall have a safety office at the department or special assistant level that consists of a primary duty safety officer and/or an ASO, and appropriate staffing.
- (2) The ASO, military or civil service, shall be in a flying status involving operational or training flights, and shall be attached to the reporting custodian. The safety office shall monitor

and manage the squadron NATOPS program to ensure compliance with reference (i). Either the department head or the ASO must be a graduate of a formal aviation safety course per reference (c). A normal tour length for the ASO shall be a minimum of 18 months. Adequate administrative personnel should be provided to support the safety office. In addition, an organization of collateral duty safety officials (safety Petty Officers or civilian equivalent) should be established throughout all activities.

d. Non-Reporting Custodians

- (1) NAVAIR activities with operational airfields shall have a trained ASO (as defined in reference (c)) assigned as the command safety official. This ASO shall be attached to the activity and may be a collateral duty assignment.
- (2) Those NAVAIR activities which are not assigned naval aircraft shall designate a collateral duty safety official to manage the internal distribution of privileged MSIRs.
- 7. <u>Prevention</u>. References (b) and (c) provide a standard mishap prevention program. Commanders/Commanding Officers are responsible for the action required to prevent mishaps within their activities, and shall have a formal program to ensure aircrew qualifications, proficiency, and currency meet requirements. The following specific guidelines provide minimum NAVAIR requirements for flight safety:
- a. Prior to assignment to flight status in NAVAIR aircraft, each individual aircrew qualification jacket shall be initially screened to ascertain previous airmanship qualifications and mishap history trends. A check-in sheet will be signed by the NATOPS officers annotating all the qualifications that were checked. See enclosure 6 for a sample NATOPS jacket audit sheet.
- b. A formal, centralized, aircrew qualifications management information system shall be maintained that reflects current information from the individual's NATOPS jacket. Minimum items to be tracked include expiration dates for NATOPS qualification, instrument rating, emergency egress, Aircrew Coordination Training (ACT) recurrency training, physiology, water survival, and physical examination/status. Pilot flight status currency shall be depicted such that the minimum currency requirements of Section II of the applicable NATOPS manual are easily validated for the preceding 90 days.
- c. Documentation shall be available which verifies the completion of mission prerequisites prior to flight as noted in the activity flight training syllabus, e.g., ground training, minimum weather, course rules, Familiarization (FAM) flights, and other syllabus flights.
- d. The activity shall develop specific training guidelines for use in the qualification/ designation of all flight qualifications, including initial aircraft FAM flights, check flights, flight leaders/section leaders, mission/helicopter/plane/aircraft commanders, flight and weapons test specific training, and functional check flight aircrew. For all aircraft, these guidelines shall stress the significance of crew coordination in the safe conduct of flights.

- e. A flight schedule or similar directive shall be published daily per reference (i) to document authorization for flight. This document provides for scheduling and coordination of flight crews, and shall be as accurate as possible. Consideration shall be given to individual qualifications and crew rest particularly when changes are made to the published schedule.
- f. Mishap analysis has demonstrated a disproportionately high percentage of mishaps occur during "unstructured" flight maneuvers, both formation and solo. As a result, comprehensive briefs are required for all flights. Signed briefing outlines (i.e., a checklist) shall be completed and ensure all phases of the flight have been considered and planned in detail. For reference purposes, completed outlines shall be filed with a competent authority.
- g. A strong, vital portion of maintenance safety is the effective completion of the quarterly Quality Assurance (QA) audits required by reference (j). Activity safety officers shall become familiar with the format utilized for these audits. Each activity safety officer is required to assist QA in conducting at least one quarterly audit. Special emphasis should be given to the effectiveness of tool and Foreign Object Damage (FOD) control programs. When units conduct test article preparation or aircraft modification, QA shall be familiar with test article preparation, instrumentation, and maintenance, and shall conduct periodic audits.
- h. The maintenance "safe for flight" certification process must meet the requirements of reference (j). The aircraft must have the operable equipment required for the specific mission per either the Mission-Essential Subsystems Matrices (MESMs) contained in reference (l) or the activity's locally modified "safe for flight" instruction. QA personnel shall review all completed maintenance action forms (OPNAV 4790/60 (May 88), Work Center Register Control and Processing Copy) before the aircraft is certified safe for flight by an individual formally trained for the billet and authorized in writing by the Commanding Officer. The preceding requirement shall be accomplished before the aircraft discrepancy logbook is presented to the aircrew for acceptance review.
- i. Activity safety surveys in the format of reference (m) shall be conducted annually and/or within 60 days of change of command/new ASO assignment. Naval Safety Center and/or other NAVAIR external activity surveys are highly encouraged as a replacement to internal activity surveys. Safety officers shall maintain a copy of the previous survey results, and the activity shall implement appropriate corrective actions to survey results.
- j. Standard Operating Procedures (SOPs) are required by reference (i), as modified by paragraph 8 below. The SOP shall be reviewed formally on an annual basis by a team of both operations and safety personnel. Procedures peculiar to the individual mission, aircraft, and locale not covered in other instructions shall be standardized in a formal manner.
- k. Each NAVAIR flying activity shall conduct a formal, all-hands safety standdown at least twice each year. All personnel directly involved with daily flight operations/flight test, as determined by the local flying activity Commanding Officer, shall be included in these standdowns. Activity Commanders/Commanding Officers shall also determine the format of

these standdowns, but all aspects of safety, including occupational safety, maintenance safety and procedures, and flight safety shall be covered. Special emphasis shall be given to reviewing/improving operating procedures.

- 1. The ASO, or the ASO's appointed representative, shall review at least one flight schedule, one QA branch audit report, and one aircraft discrepancy log book each month to verify compliance with prevention measures outlined in paragraph 7. A local survey report similar to enclosure (1) may be utilized to forward to the activity's Commander/Commanding Officer the results of each review. Documentation of this review and the findings shall be kept on file for three years.
- m. The activity ASO shall work with the local message center to control dissemination of messages to ensure that only those personnel authorized by that ASO are allowed to receive messages containing privileged information. For non-reporting custodian personnel, the local AIR-5.0 ASO shall authorize privileged information dissemination. The ASO shall brief privileged information recipients on the requirements for proper handling following DOD Directive 6055.7, Mishap Investigation, Reporting and Recordkeeping, and periodic review of these requirements is required. In addition, written procedures shall be established for MSIR handling to prevent unauthorized disclosures of privileged information.
- n. Aviation Safety Councils and Committees shall be established at each wing and each reporting custodian in order to emphasize safety at all levels of command, and to encourage active participation by all personnel in a vigorous safety program. These councils shall include representatives from all NAVAIR aviation activities at that site. Enclosure (2) provides Safety Council guidelines; and enclosure (3) provides Safety Committee guidelines.
- o. An active human factors program is an integral part of any proactive aviation safety program. Although human factors monitoring is not inherently a safety function, the ASO is a vital part of the human factors monitoring process, and shall be an active supporter of this program. All aviation commands shall establish a human factors program to include Human Factors Councils and Boards.
- p. A formal pre-mishap plan, satisfying the requirements of reference (c) and paragraph 11 below, shall be established by each reporting custodian and each NAVAIR air station.
- q. Squadron/Naval Aviation Depot (NAVAVNDEPOT) Commanding Officers shall review any commercial maintenance contracts affecting any of their aircraft or flight operations to ensure sufficient contractual requirements are in place to reduce ground and flight risks as much as is reasonable. Commanding Officers shall work with the contract PCO to rectify any deficiencies.
- 8. SOPs. The following SOP shall be adhered to:
- a. <u>Pilot Qualification and Currency</u>. Flight crews are limited to NATOPS qualification as pilot-in-command in two aircraft. When qualification in more than two aircraft is required, the activity Commander/Commanding Officer (not to be delegated) shall approve all designations

based on a risk management analysis. The Commanding Officer shall give strong consideration to differently configured same-series aircraft. The absolute maximum number of individual flight crew NATOPS qualifications is four aircraft. The minimums to act as pilot-in-command are 7.5 hours and 3 flights in each type/model aircraft in the last 60 days. (Commanding Officers shall carefully evaluate the need for flight hour minimums in different series of aircraft where emergency procedures, critical performance limits, and mission critical displays are significantly different than the pilot's primary aircraft.) If currency lapses over 60 days, a dedicated "back-in-the-saddle" flight shall be flown. This flight may not be flown in conjunction with any other mission. Return to flight in an aircraft not flown in 90 days shall require an operational flight trainer (or weapon system trainer) if available and feasible, a dedicated training flight, and a closed book emergency procedures examination. Pilots must attain a minimum of 7.5 hours by 90 days or complete the 90-day requalification requirements in order to be considered current and available for mission related flights. Pilots shall be requalified per the applicable NATOPS if the aircraft is not flown within a consecutive six-month period. All aircrew shall pass a closed book emergency procedures examination monthly for each type aircraft flown.

- b. <u>Airshows</u>. The Blue Angels are the official Navy demonstration team funded to practice and participate in airshows across the country. Therefore, aircraft for which NAVAIR is the controlling custodian shall not be utilized for any flight demonstration during airshows, open houses, air expositions, sporting events, or other such recurring events. Aircraft shall not be used for static displays during open house or similar events other than at the home field of the reporting custodian. Exceptions to this policy are authorized per reference (n).
- c. <u>Orientation Flights</u>. The unique configuration and mission of Research, Development, Test, and Evaluation (RDT&E) aircraft make them unsuitable for orientation flights. Normally, flights in RDT&E aircraft are restricted to those who contribute directly to, and are necessary for, accomplishment of the flight test program, per reference (o).
- d. <u>Crew Duty Period</u>. A reasonable crew duty day must be determined as a result of a realistic Operational Risk Analysis. NAVAIR test flights often require exacting precision and concentration which increase fatigue. The following crew duty period restrictions apply to all NAVAIR flight crewmembers/noncrewmembers:
- (1) The crew duty period begins when an individual reports for work (either flight or administrative duties) and ends when the engines are stopped at the end of a mission or series of missions.
- (2) The basic crew duty period will not exceed 12 consecutive hours. (Exception: The activity Commander/Commanding Officer (not to be delegated) may grant extensions to the crew duty period of not more than two hours on a case-by-case basis.)
- (3) When flying support flights in dual-piloted aircraft with an operative autopilot installed and used, the maximum crew duty period is 16 consecutive hours.

(4) When flying other than support flights, pilots in single-piloted helicopters are limited to a maximum of 6 flying hours in a 12-hour crew duty period.

NAVAIR waivers for missions which exceed the above are available based on the submission of an Operational Risk Analysis which demonstrates that the flight will have minimal risk.

- e. <u>Crew Rest</u>. The crew rest period is the non-work period immediately preceding the crew duty period. This period should be a minimum of 12 hours. At least eight uninterrupted hours shall be allowed for sleep. At least 15 hours of continuous off-duty time shall be provided following the flights where the time zone difference between the origin and destination are more than 2 hours.
- f. Night Vision Devices (NVDs). Each command utilizing NVDs in training or project flying shall ensure compliance with training and operational requirements, and restrictions per reference (i).
- 9. <u>Training</u>. Aircrew and maintenance personnel shall receive formal ground training applicable to the mission or task at the minimum rate of two hours per month. All training shall be documented.
- a. Aviation maintenance personnel shall abide by the general guidelines of reference (l) and specifically shall receive formal, structured training each month for the aircraft equipment and systems applicable to their billet.
- b. Aircrew personnel shall complete a minimum of one simulator flight dedicated to basic mission/NATOPS/emergency procedures semiannually in each aircraft type (two maximum) in which the crew is qualified per the applicable aircraft NATOPS manual. It is highly recommended that all NATOPS and instrument checks be conducted in a simulator to maximize emergency procedure realism. A static cockpit refresher period may be substituted when a simulator for that aircraft type is not operational in the Navy inventory.
- c. The ASO is responsible to ensure safety training is provided and documented on a continuing basis as follows:
- (1) Aircraft Mishap Board training and senior member training shall be conducted at least quarterly. Suggested topics for training are included in enclosure (5);
 - (2) pre-mishap plan/drills to include annually one realistic mishap drill; and
- (3) general safety and training (excluding those topics covered under Occupational Safety and Health (OSH) training).
- 10. <u>Flight Test Issues</u>. Aviation safety is a critical part of disciplined flight test processes. The concepts of "build-up" and "engineering discipline" are rooted in a risk management approach to achieving the maximum safety in test evolutions. The ASO in all aviation commands conducting

RDT&E evolutions shall monitor the effectiveness of these risk management concepts through active involvement in test evolution planning and execution. Specific areas of concern are as follows:

- a. Special Access Required (SAR) Programs. It is strongly recommended that the ASO be involved in SAR programs as early as possible in order to assess the risk management and safety posture of these programs. Early identification of flight test safety hazards and mishap security issues associated with these programs will ensure proper risk mitigation can be accomplished. The ASO can also help tailor command pre-mishap plans and test plan special precautions in order to cover any unique security issues.
- b. Executive Review Boards (ERBs). The flight test command ASO or appropriate safety representative shall be an active member of all ERBs to ensure early identification of flight test safety hazards. This safety assessment shall focus on flight safety concerns in addition to range safety.
- c. <u>Training/Test Qualifications Monitoring</u>. The flight test command ASO shall monitor all aircrew (military and civilian) flight test qualifications in addition to NATOPS qualifications. The ASO shall become familiar with unique flight test training requirements and make recommendations to improve these processes to mitigate risk.
- d. <u>Test Incurred Damage</u>. All test incurred damage or mishaps shall initially be treated as defined naval mishaps. Appropriate procedures as defined in reference (c) shall be followed until a determination is made by the parent wing command that the damage or mishap was anticipated in test planning.
- 11. Mishap Reporting/Investigation. All injuries and mishaps shall be reported and investigated per references (c) and (p). Operational risk management demands that hazards and trends be identified and mitigated before they cause a mishap. Consequently, activities shall take extra efforts to document incidents and lessons learned during the course of normal operations. The ASO shall be responsible for the reporting of those incidents reportable under reference (d). In addition to normal requirements, Naval Air Systems Command Headquarters (NAVAIRHQ) shall be notified by phone within 4 hours of a Class A or Class B mishap and within 24 hours of a Class C mishap.
- a. Phone notification and assignment of senior member (Class A Flight/Flight Related Mishap (FM/FRM)) can be effected during working hours with AIR-5.0F on DSN 757-2244/6/8, Commercial (301)757-2244/6/8, or after hours with the Command Duty Officer at DSN 757-7850 or Commercial (301)757-7850.
- b. Flight mishaps with government furnished equipment under bailment or lease to contractors shall be reported by the Government Flight Representative (GFR) or an assigned designee. At that time, NAVAIR shall provide guidance as to Aircraft Mishap Board (AMB) composition and reporting requirements. NAVAIR, as controlling custodian, shall normally accept mishap accountability, and assign reporting and investigating responsibilities to an appropriate NAVAIR activity. AIR-5.0F will assign the AMB and provide liaison with DLA

and other services as required. DLA will normally provide a military representative to the NAVAIR AMB. The senior member shall decide if the DLA representative will be a member of the AMB or provide liaison only.

c. AIR-5.0F maintains an updated list of pre-identified aviators eligible to serve as the senior member of an AMB for Class A FM/FRMs. Senior members can come from the PEOs, NAVAIRHQ, or NAVAIR field activities. The following activities are tasked with providing prospective senior members in the numbers shown, and for updating the senior member list as necessary:

Naval Test Wing Atlantic, Patuxent River- 4
Naval Test Wing Pacific, Point Mugu - 4
Naval Surface Warfare Center, Coastal Systems Station, Panama City, FL - 1
Naval Research Laboratory - 1
All NAVAVNDEPOTs - 1 each

Senior members must be USN/USMC designated Naval Aviators or Naval Flight Officers, Grade 0-5 (or above), and a graduate of the Aviation Safety Officer's course or Aviation Safety Command course. When senior members are tasked per this instruction, the mishap activity shall provide funding for travel and per diem expenses. Prospective senior members shall be identified, notified, and trained by their activity or wing.

- d. A NAVAIR flight surgeon may be requested for mishap investigations at locales where one is not assigned/available. Coordination should be made using the phone numbers listed in paragraph 11a.
- e. Due to the large geographic areas under command control, all NAVAIR activities must be prepared to preserve mishap wreckage, evidence, and provide mishap investigation support in the event of aircraft mishaps within activity confines per reference (c). Each command must be prepared to initiate AMB duties within the scope of the command's pre-mishap plan until properly relieved by a duly appointed AMB.
- f. Full Scale Aerial Targets (FSATs). Mishaps involving FSATs, such as the QF-4, when flown as a drone with No Live Operator Onboard (NOLO) do not require an investigation or report under reference (c). However, failure to thoroughly investigate and learn from incidents that occur during NOLO operations allows unidentified hazards to go uncorrected. Allowing unidentified/uncorrected hazards to exist can result in preventable losses of FSATs, and possibly aircrew, when the aircraft is returned to a manned status. Since these aircraft meet the definition of naval aircraft under reference (c) while manned, all abnormal occurrences, including those occurring during NOLO operations, shall be investigated following the guidance and format in reference (c). The reporting custodian for the QF-4 is responsible for conducting appropriate investigations, and submitting hazard reports and/or MSIR, using the guidance of reference (c). These reports shall be submitted to the AIR-5.0 via the chain of command. These reports shall

not be submitted by naval message. The reports shall be endorsed by the chain of command using the format and time guidelines of reference (c). A lessons learned, electronic database shall be jointly developed and maintained by Threat/Target Systems (5.3), and the Naval Weapons Test Squadron, Point Mugu (5.6.E) covering all phases of FSAT operations.

- 12. Waivers. With limited numbers of high value assets, it is difficult to justify actions which waive valid requirements and unnecessarily endangers personnel and equipment. Specifically, Section II of applicable NATOPS manuals provides currency and training requirements for individual aircraft. Waiver of such requirements, and of aircraft equipment requirements, is a direct command responsibility and cannot be delegated. When granted, specific waivers will be of short-term duration and authorized in writing. The Commander/Commanding Officer must present an operation risk management analysis which justifies the waivers.
- 13. <u>Awards</u>. COMNAVAIRSYSCOM will sponsor an annual (fiscal year) aviation safety award within NAVAIR. Each reporting custodian shall annually forward a safety award nomination through their chain of command, via letter/message/e-mail/fax to AIR-5.0F not later than 31 January. Enclosure (4) provides the guidelines to be followed for the NAVAIR award.
- 14. Action. All addressees shall conduct an aggressive, continuing mishap prevention program with the objective of enhancing readiness through mishap free operations. Enclosures (1), (2), (3), (4), and (5) provide additional guidance.
- 15. <u>Review</u>. AIR-5.0F shall review annually the contents herein and provide recommendations for changes and deletions to the Commander.

C. E. STEIDLE

Distribution: FKAlA (established quantity); others 2 copies

SNDL: 24A; A1J1A, A1J1B, A1J1C; PEO(JSF); A3 (OP-09F, 05F); A6; B2A (DLA); C20C (Patuxent River); E3A; FF5; FKAlA (Deputy Commanders, Assistant Commanders, Command Special Assistants, Program Directors, Designated Program Managers, Program Coordinators, Department Heads and Division Heads); FKR

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NAVAIRHQ Directives Web Address: www.nalda.navy.mil/instructions/default.cfm

Aviation Safety Office Monthly Survey Report Format

To:	Safety Officer Commanding Officer Executive Officer
Subj:	SAFETY OFFICER SURVEY FOR THE MONTH OF
Ref:	(a) NAVAIRINST 3750.5B
1. A s apply:	afety review was conducted per reference (a), paragraph 7l. The following comments
9	Flight Data:

PILOTS (number assigned)	ENLISTED AIRCREW (number assigned)
NFO (number assigned)	PS/FTE/SEL PAX (number assigned)

CATEGORY		IM(0)MI		YTD	
Aircraft Hours			 		
Aircraft (Day)			 		
Aircraft (Night)			 		
Pilot Total					
Pilot (Day)					
Pilot (Night)			 	·	
Total Sorties					
FCF Hours			 		
FCF Sorties					
	2L7/9/0	1C1	2L7/9/ 0	1C1	
Project Hours					
Project Sorties					

b. Mishap Statistics:

	CLASS A MONTH/YTD	CLASS B MONTE/YTD	CLASS C MONTH/YTD
FM/FRM	/	/	/
DATE LAST			
Mishap Free Hours			
AGM	/	/	/
DATE LAST			
Mishap Free Hours			

c. ASO Review Checklist:

	Reviewed	Comments (Optional):
NATOPS Pilot/Aircrew Training (Flight) Pilot/Aircrew Training (Ground) Flight Schedule Review Survival Gear		
TRAINING Drills/AMB Training		
MAINTENANCE PPE Review QA Reports		
ADB Review (BuNo):		
Total Discrepancies Down Discrepancies Repeat Discrepancies A799 "A" Codes (Before Flight) "A" Codes (Inflight)		

	MONTH	YTD
Lost Tool Reports		
Misuse/Abuse Reports		
FOD		
Things Falling Off Aircraft (TFOA)		
NATOPS Change Recommendations		
Hazard Reports		
Anymouse/Safetygram		
BZ		
Safety Articles/Publications		
Mishap Recommendations (Outstanding)		
Hazard Recommendations (Outstanding)		

Copy to: All Department Heads

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Test Wing/Air Station/NAVAVNDEPOT Aviation Safety Council Guidelines

- 1. <u>Background</u>. An Aviation Safety Council (ASC) shall be established at each NAVAIR activity.
- 2. <u>Mission</u>. The mission of each ASC shall be to promote the Naval Aviation Safety Program within the activity.
- 3. Tasks. The tasks of each ASC include, but are not limited to, the following:
- a. conduct a campaign against aviation mishaps, which result in the waste of manpower and materials:
 - b. promote the local Aviation Mishap Prevention Program;
 - c. inform AIR 5.0F promptly of all matters that may have TEAM wide implications; and
 - d. review the minutes of the previous ASC meeting for status of action items.
- 4. Composition. The ASC shall consist of the following officers, where applicable:
 - Wing Commander, Activity Commanding Officer, or Safety Representative (Chairman)
 - Training Officer or representative
 - Operations Officer or representative
 - Aircraft Maintenance Officer
 - Flight Test Engineering (4.11) representative
 - ASOs of tenant activities
 - Marine Air Detachment representative
 - Flight Surgeon or representative
 - Government Flight Representative or Integrated Test Team (ITT) Safety
 - Contractor Safety representative
 - Range representative
 - Test Article Preparation representative
 - other competency representatives as required
- 5. <u>Meetings</u>. The ASC shall meet at least once each quarter, or more frequently if desired, at the discretion of the senior member.
- 6. <u>Minutes of Meeting</u>. The chairman shall submit minutes of ASC meetings, including brief remarks concerning the items reviewed by safety committee members, to the Wing Commander.

Squadron Aviation Safety Council Guidelines

- 1. <u>Background</u>. Squadron Aviation Safety Council (ASC) shall be established at each NAVAIR squadron. Copies of the minutes should be submitted to the Test Wing Commander.
- 2. <u>Mission</u>. The mission of each ASC shall be to promote the Naval Aviation Safety Program within the activity.
- 3. Tasks. The tasks of each ASC include, but are not limited to, the following:
- a. conduct a campaign against aviation mishaps, which result in the waste of manpower and materials;
 - b. promote the local Aviation Mishap Prevention Program;
- c. inform the Test Wing promptly of all matters that may have squadron-wide implications; and
 - d. review the minutes of the previous ASC meeting for status of action items.
- 4. Composition. The squadron ASC shall consist of the following officers, where available:
 - Commanding Officer, Executive Officer, or Chief Test Pilot (Chairman)
 - NATOPS Officer
 - Operations Officer
 - Aircraft Maintenance Officer
 - Aviation Safety Officer
 - Flight Surgeon or representative
 - Contractor Safety representatives
- 5. <u>Meetings</u>. The ASC shall meet at least once each quarter, or more frequently if desired, at the discretion of the senior member.
- 6. <u>Minutes of Meeting</u>. The minutes of ASC meetings, including brief remarks concerning the items reviewed by safety committee members, shall be documented by the squadron ASO and submitted to the Wing Safety Office.

Safety Committee Guidelines

- 1. <u>Purpose</u>. A Safety Committee shall be established at each aviation activity/squadron in order to emphasize safety at all levels of command, and to encourage active participation by all personnel in a vigorous safety program.
- 2. <u>Scope</u>. The scope of the Safety Committee shall include all matters pertinent to aviation. Safety, and the emphasis of such, must be the prime consideration of this committee.
- 3. General. It is of prime importance to carry safety to the place where aviation safety begins the maintenance areas and flight lines where aircraft are serviced. Therefore, participation of all enlisted personnel in the safety endeavor is mandatory. A Safety Committee shall provide for active participation and responsibility by maintenance personnel. The Safety Committee should meet on a monthly basis, publish the minutes of its meeting, and ensure copies are distributed to all branches within the unit. The committee members should not harbor any fear of repercussions resulting from constructive recommendations.
- 4. <u>Composition</u>. The committee must reflect all the segments of the unit, and each department and work center shall be represented by personnel E-8 and below. The chairperson for the committee should be elected from within the peer group. The ASO may act as an advisor. The normal composition of the Safety Committee is:
 - Unit Safety Petty Officer/Official
 - Division/Branch Representative
 - Medical
 - Other technical experts as needed
 - Contractor safety representative

Annual Aviation Safety Award

- 1. A NAVAIR board shall convene annually (calendar year) to select winners for the Aviation Safety Award. One winner will be selected from each of the following categories: NAVAVNDEPOTS, RDT&E reporting custodians.
- 2. The following calendar year information is requested, via their chain of command, from each reporting custodian no later than 31 January. Submissions are to be no more than three pages in length. Break out the statistics, providing all information requested (i.e., 1,223 day hrs/347 night hrs/985 sorties):
 - Total flight hours day/night/sorties
 - Flight Purpose Code 2L7, 2L9, and 2L0 cumulative hours/sorties
 - Landings (field/ship)
 - Average per month pilot flight time (day/night)
 - Average per month per aircrew ground training hours
 - Number and type of aircrew waivers of CNO minimums
 - Average per month flight simulator training hours
 - Date of last FM/FRM; all years (by class A, B, C)
 - Date of last ground mishap; all years (by class A, B, C)
 - Total FOD engines
 - TFOA (in-flight)
 - Number of:
 - Hazard Reports (3750)
 - Hazardous Material Report (HMR)
 - Explosive Mishap Report (EMR)
 - Conventional Ordnance Discrepancy Report (CODR)
 - NATOPS change recommendations
 - Safety articles published (include name and date of publication)
 - Commanding Officer's comments

Recommended Aircraft Mishap Board Training Outline

- 1. The following is a training outline recommended for AMB training. It is recommended that AMB training be conducted monthly. The outline is divided into 12 groups to accommodate that and includes the required annual drill.
- a. Overview of message requirements, mishap kit contents and location, recommended personal equipment.
- b. Overview of site security and hazards, scene evaluation, wreckage diagrams and photography.
- c. Witness interviews, use of law enforcement agencies, dealing with the media and high-risk communication issues.
- d. Naval Safety Center Investigator assistance, technical representatives, expert witnesses, engineering investigations, resolution of conflicting evidence.
- e. Overview of fire/explosion investigation, instruments, light bulbs, power plants and structures.
- f. Mishap board psychology, management and report preparation. This session should include the Flight Surgeon and address Critical Incident Stress (CIS) issues faced by board members.
- g. Flight Surgeon duties, aeromedical investigation, use of flight physiologists and dangers of bloodborne pathogens.
 - h. Human factor investigations.
 - i. Dealing with unusual mishap sites.
- j. AMB drill. It is recommended that this be a field drill that includes response by base support activities such as crash crew, security and medical.
- k. Session to accomplish specialized training requirements such as respirator qualifications, etc..
- 1. Review lessons learned from any incidents or mishaps that occurred during the year and incorporate them into the training plan. Review AMB composition and prepare letters of designation for replacement members of standing boards.

SAMPLE

NATOPS JACKET CHECKLIST	3710.7 REF	AIRCREW			
NATOIS SACRET CHECKEIST				I	
INSIDE FRONT COVER					
Record of Disclosure Form					
1766014 Of Discrete Collins		t			
SECTION I					
	A.2.1a				
Part A. Review and Certification Record (OPNAV 3760/32A (Apr 81)) Initial Check-in Review/Annual Review (+/- 30 days of DOB)	7.2.10			,	
/Major Change Of Flight Status					
Things of Fig. Calab		t			
Part B. PCS Orders	A.2.1b	· · · · ·			
Only Most Recent Orders					
Volunteer Flight Status Letter (Enlisted)			· · · · · · · · · · · · · · · · · · · 		
Ltrs Of Suspension/Revocation Of Flt Status					
Part C. Medical Clearance (NAVMED 6410/1 (Rev. 5/90) or	A.2.1c		·		
NAVMED 6410/2 (Rev. 5/90))					
Signed Original Current Up/Down Chits					
Medical Waivers In Effect				ļ	
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Part D. Flight Equipment Issue (OPNAV 3760/32B (Apr 81))	A.2.1d		· 		
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SECTION II			-		
Part A. Flight Personnel Designation Record (OPNAV 3760/32C (Apr 81))	A.2.2a				
Functional Designations Only					
(i.e. AC, NATOPS Evaluator, PMCF)					
			· ·		
Part B. Mission Qualification Record (OPNAV 3760/32D (Rev. Apr 90))	A.2.2b				
Tactical and Mission Designations					
Part C. Miscellaneous	N/A		-		
SECTION III					
Part A. Schools and Courses Attendance Record					
(OPNAV 3760/32E (Apr 90))				ļ	
Formal Schools and Courses	A.2.3a				
	A 2.25				
Part B. Operational Physiology and Survival Training	A.2.3b			ļ ———	
(OPNAV 3760/32F (Apr 81))				·	
NAWSTP/Physiology/SERE/Egress	— —— —		·	 	
Physiology Every 4 Years				·	
Swim Every 4 Years DWEST - Once	— 		ļ ————	ļ	
Heeds Every 4 Years (Helo/E-2/C-2)				 	
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Part C. Examination Record (OPNAV 3760/32G (Apr 81))	A.2.3c			t	
All Exam Grades/Current Open/Closed Book	— 				
THE EXAMINATION OF THE PROPERTY OF THE PROPERT			·		
Part D. NATOPS Evaluation Report (OPNAV 3710/7 (Rev. Mar 95))	A.2.3d		·	İ	
Expiration Date Shown On Evaluation					
Expires Last Day Of Month	— † †			İ	
Written Exam Taken Max 60 Days Prior To Flight Check				I	
Part E. NATOPS Instrument Rating Request (OPNAV 3710/2 (Jan 74))	A.2.3e				
Expires At End Of Birth Month				1	
Written Exam Taken Before Flight Check Max 60 Days Prior					
Flight Time Required Last 6 Months					
	++	1	I	1	
6 Hrs Instrument Time/6 Precision/6 Non-precision Approaches					
6 Hrs Instrument Time/6 Precision/6 Non-precision Approaches Flight Time Required Last 12 Months					